

Introduced _____
Public Hearing _____
Council Action _____
Executive Action _____
Effective Date _____

County Council Of Howard County, Maryland

2005 Legislative Session

Legislative Day No. **3**

Bill No. 4-2005

Introduced by: The Chairman at the request of the County Executive

AN ACT amending the Building Code of Howard County; changing the term “floodplain district” to the term “floodplain”; amending the requirements for work exempt from a permit; amending insulation requirements; correcting chapter references; making technical corrections; and generally relating to the Howard County Building Code.

Introduced and read first time _____, 2005. Ordered posted and hearing scheduled.

By order _____
Sheila M. Tolliver, Administrator

Having been posted and notice of time & place of hearing & title of Bill having been published according to Charter, the Bill was read for a second time at a public hearing on _____, 2005.

By order _____
Sheila M. Tolliver, Administrator

This Bill was read the third time on _____, 2005 and Passed ____, Passed with amendments ____, Failed ____.

By order _____
Sheila M. Tolliver, Administrator

Sealed with the County Seal and presented to the County Executive for approval this ____ day of _____, 2005 at ____ a.m./p.m.

By order _____
Sheila M. Tolliver, Administrator

Approved by the County Executive _____, 2005

James N. Robey, County Executive

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN ALL CAPITALS indicates additions to existing law; Strike-out indicates material deleted by amendment; Underlining indicates material added by amendment.

1 **Section 1. *Be It Enacted*** by the County Council of Howard County, Maryland, that
2 *Subparagraphs (ii) and item d. of Subparagraph (iv) of Paragraph 24 and Paragraph 68*
3 *of Subsection (a) of Section 3.101 “Local Amendments to the International Building*
4 *Code, 2003 Edition” of Subtitle 1 “Building Code” of Title 3 “Buildings” are amended*
5 *to read as follows:*

6
7 **Title 3. Buildings.**

8 **Subtitle 1. Building Code.**

9 **Section 3.101. Local Amendments to the International Building Code, 2003 Edition.**

10 (a) (24) *Subsection 105.2 Work Exempt from Permit.*

11 (ii) In Item 4, delete “4 feet” and substitute “3 feet” AND DELETE
12 “BOTTOM OF THE FOOTING” AND SUBSTITUTE “LOWEST
13 ADJACENT GRADE”;

14 (iv) Add the following as exception (14) under “building” at the end of
15 this subsection:

16 The following work on an existing single family dwelling:

17 d. Site work:

- 18 i. Paving a driveway;
19 ii. Installation of a patio, sidewalk, or landscaping;
20 iii. Installation of a retaining wall that is 3 feet or less
21 in height MEASURED FROM THE LOWEST
22 ADJACENT GRADE TO THE TOP OF THE
23 WALL; or
24 iv. Installation of a flagpole or flagpole base.

25
26 (68) *Section 3110 Floodplain [[District]].* Add new section 3110 after section
27 3109 as follows:

28 **Section 3110 Floodplain [[District]].**

29 **3110.1 General.** For the purpose of this section, the floodplain [[district]]
30 is described in Title 16, Subtitle 7 of the Howard County Code.

31 **3110.2 Within Designated Floodplain [[District]].**

The construction, reconstruction, modification, alteration, repair, or improvement of a building, mobile home, or other structure located within a designated floodplain [[district]] shall be done in accordance with the requirements set forth in subsections 3110.2 through [[3110.7]] 3110.9.

3110.2.1 New construction. New residential or nonresidential construction shall not occur within a designated floodplain [[district]].

Exception #1: Except for mobile homes, an existing nonconforming structure located in a designated floodplain [[district]] which is destroyed by fire, flood, or other calamity may be restored to the same size and dimension and in the same location on the same lot as the destroyed structure, provided construction begins within 12 months of the date of destruction. Construction shall comply with the requirements of subsection [[3107.4]] 3110.4 for new construction adjacent to a floodplain [[district]] (elevating or floodproofing). Variances to the requirements set forth in subsection [[3107.4]] 3110.4 may be granted by the building official in accordance with FEMA regulations, Section 60.6(A)(1), (3)(4)(5) and (6). The intentional demolition and reconstruction of any nonconforming structure is prohibited by this code.

Exception #2: Transportation networks, utility installations, piers, open pier structures, and open decks approved by the department of public works. Streets, sidewalks, pathways, and utility systems in accordance with the Howard County Design Manual and all other applicable codes, ordinances, resolutions and regulations.

3110.2.2 Additions and enlargements. An existing nonconforming structure located in the floodplain [[district]] shall not be expanded or enlarged.

3110.2.3 Modifications, alterations, and repairs. A modification, alteration, repair, or improvement that costs less than 50% of the fair market value of the structure may be made to an existing nonconforming structure located in a designated floodplain [[district]] without floodproofing or elevating if the owner demonstrates through a Maryland

1 state registered professional engineer that floodproofing or elevating is
2 impractical.

3 **3110.3 Substantial improvements within the floodplain [[district]].**

4 Substantial improvements within the floodplain [[district]] shall meet the
5 standards set forth in this subsection.

6 **3110.3.1. Residential.** The lowest floor, including a basement, of a
7 substantial improvement to an existing nonconforming residential
8 structure located within a designated floodplain [[district]] shall be
9 elevated to at least 2 feet above the 100-year flood elevation.

10 **3110.3.2. Nonresidential.** The lowest floor, including a basement, of a
11 substantial improvement to an existing nonconforming nonresidential
12 structure shall be elevated to at least 2 feet above the 100-year flood
13 elevation or shall be designed so that any area of the building which is
14 lower than 2 feet above the 100-year flood elevation as determined or
15 approved by the department of public works, is watertight with walls
16 substantially impermeable to the passage of water and with structural
17 components having the capability of withstanding applicable hydrostatic,
18 hydrodynamic, impact, soil, and, when applicable, hurricane and tidal
19 wave loading conditions. The water tightness and structural capabilities
20 shall be those described in floodproofing regulations published by the
21 Office of the Chief of Engineers, U.S. Army, Washington, D.C., March
22 1992.

23 **3110.4 Construction Adjacent to a Floodplain [[District]].** Where a
24 building is located adjacent to a designated [[floodplain district,]]
25 FLOODPLAIN, defined in Title 16, Subtitle 7, the following subsections
26 shall apply:

27 **3110.4.1 Residential.** In new construction of a residential building or an
28 addition or substantial improvement to a residential building, all floors,
29 including those of basement and storage areas, shall be elevated at least 2
30 feet above the 100-year flood level.

3110.4.2 Nonresidential. In new construction of a nonresidential building or an addition, or substantial improvement to a nonresidential building, either:

- (i) All floors (including those of basement and storage areas) shall be elevated at least 2 feet above the 100-year flood level as determined or approved by the department of public works; or
- (ii) The construction or improvement (including attendant utility or sanitary facilities) shall be designed so that any area of the building which is lower than 2 feet above the 100-year flood elevation as determined by the department of public works, is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of withstanding applicable hydrostatic, hydrodynamic, impact, soil, and, when applicable, hurricane and tidal wave loading conditions. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities associated with the buildings shall be designed or located to prevent water from entering or accumulating within the components during flood conditions. The water tightness and structural capabilities shall be those described in floodproofing regulations published by the Office of the Chief of Engineers, U.S. Army, Washington, D.C., March 1992.

3110.4.3. Modifications, Alterations or Repairs. A modification, alteration, repair, or improvement that costs less than 50% of the fair market value of the structure may be made to an existing nonconforming structure located adjacent to a designated floodplain [[district]] without floodproofing or elevating.

3110.5 Substantial Improvements ADJACENT TO A FLOODPLAIN.

3110.5.1 Residential. The lowest floor, including a basement, of a substantial improvement to an existing nonconforming residential structure located adjacent to a designated floodplain [[district]] shall be elevated to at least 2 feet above the 100-year flood elevation.

3110.5.2 Nonresidential. The lowest floor, including a basement, of a substantial improvement to an existing nonconforming nonresidential structure located adjacent to a designated floodplain [[district]] shall be elevated to at least 2 feet above the 100-year flood elevation or, shall be designed so that any area of the building which is lower than 2 feet above the 100-year flood elevation as determined or approved by the department of public works, is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of withstanding applicable hydrostatic, hydrodynamic impact, soil and when applicable, hurricane and tidal wave loading conditions. Electrical, heating, ventilation, plumbing and air conditioning equipment, and other service facilities associated with the buildings shall be designed or located so as to prevent water from entering or accumulating within the components during conditions of flooding. The water tightness and structural capabilities shall be those described in floodproofing regulations published by the Office of the Chief of Engineers, U.S. Army, Washington, D.C., March 1992.

3110.6 Verification. For the purpose of verifying compliance with section [[3107.0]] 3110.4, the following shall apply:

- (i) When floodproofing by means other than elevating, a document stating that the proposed construction has been adequately designed to withstand the loading conditions stated in subsection [[3107.4.2(b)]] 3110.4.2(II) shall be certified by a professional engineer or architect currently registered in Maryland. This document shall be required prior to issuance of a building permit.
- (ii) When floodproofing by elevating is utilized, the owner shall agree, in writing, to provide a FEMA Elevation Certificate Form #81-31 completed by a professional engineer or professional land surveyor currently registered in Maryland, certifying that the as-built lowest floor of the structure is elevated at least 2 feet above the 100-year floodplain elevation. The agreement shall be made prior to the

issuance of the building permit and the completed certification shall be submitted prior to foundation approval by the Howard County Building [[Inspector]] OFFICIAL.

(iii) Fair market value of a structure shall be established by a recent (within 6 months) formal appraisal from a qualified appraiser. Fair market value shall not include land value.

(iv) Cost to repair or improve a structure shall be established by recent (within 6 months) written estimate from a licensed contractor and shall include the complete cost of repair or improvement to the point of use or occupancy.

3110.7 Definitions.

Accessory structure. A detached structure on the same parcel or property as the principal structure that has a use which is incidental to the principal structure including, but not limited to a shed or detached garage.

Basement. An enclosed area which is below grade on all sides.

Floodplain [[district]]. All areas subject to inundation by waters of the 100-year FLOOD. [[flood, designated as “FP District” and shown as an overlay on the zoning map.]] The source of this delineation shall be the [[type 15 flood insurance study for Howard County, Maryland by the U.S. Department of Housing and Urban Development, Federal Insurance Administration,]] FLOOD INSURANCE STUDY AND FLOOD INSURANCE RATE MAPS, PREPARED FOR HOWARD COUNTY BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY or [[any 100-year ultimate floodplain delineation determined by]] THE FLOODPLAIN STUDIES AND REQUIREMENTS OF the department of public works AND THE DEPARTMENT OF PLANNING AND ZONING , WHICHEVER IS MORE RESTRICTIVE.

Floodproofing. Any combination of additions, changes, or adjustments to a structure which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, or structures and their contents.

1 **Historic structure.** A building listed on the National Register of Historic
2 Places, a state inventory of historic places, or an inventory of historic
3 structures adopted by resolution of the County Council.

4 **Lowest floor.** The lowest floor or the lowest enclosed area, including a
5 basement. Lowest floor does not include an unfinished or flood resistant
6 enclosure used solely for parking vehicles, building access, or storage in
7 an area other than a basement area. The enclosure shall not be built so as
8 to render the structure in violation of the applicable non-elevation design
9 requirements of subsections [[3107.4.2]] 3110.4 and [[3107.6]] 3110.6 of
10 this Code.

11 **Mobile home.** A transportable residential structure that is built on a
12 permanent chasis and is designed for use with or without a permanent
13 foundation when connected to the required utilities.

14 **New construction.** A structure for which the application for a building
15 permit was received by the department on or after the date of adoption of
16 this subsection, including any subsequent improvements. The repair or
17 replacement of a mobile home because of substantial damage is
18 considered to be new construction.

19 **Substantial damage:** Damage of any origin sustained by a structure where
20 the cost of returning the structure to its condition prior to damage would
21 equal or exceed 50% of its market value before the damage occurred.

22 **Substantial improvement.** The repair, reconstruction, or improvement of
23 a building or structure, the cost of which is equal to or greater than 50% of
24 the market value of the building or structure prior to damage,
25 improvement, or repair. For the purpose of this definition, "substantial
26 improvement" occurs when the first alteration of a wall, ceiling, floor, or
27 other structural part of the building begins, whether or not that alteration
28 affects the external dimensions of the building or structure. The term does
29 not include any project for improving a building or structure to comply
30 with existing state or local health, sanitary, or housing code requirements

1 which are necessary to assure safe living conditions. This term does not
2 include an alteration of a historic structure.

3 **Variance.** The grant of relief from a term of this subtitle.

4 **3110.8 Variances and Waivers.** A variance or waiver of this section
5 shall not be allowed.

6 **3110.9 OTHER AGENCIES.** A PERMIT ISSUED BY THE
7 BUILDING OFFICIAL UNDER THIS SUBTITLE IS NOT VALID
8 UNTIL ALL NECESSARY PERMITS FOR THE DEVELOPMENT
9 ARE OBTAINED. RECEIPT OF FEDERAL OR STATE PERMITS
10 DOES NOT EXEMPT A DEVELOPMENT FROM THE PROVISIONS
11 OF THIS SUBTITLE.

12
13 **Section 2. And Be It Further Enacted** by the County Council of Howard County,
14 Maryland, that Paragraphs 28, 29 and 30 of Subsection (b) of Section 3.102
15 “Amendments to the International Residential Code, 2003 Edition” of Subtitle 1
16 “Building Code” of Title 3 “Buildings” is amended to read as follows:

17
18 **Title 3. Buildings.**

19 **Subtitle 1. Building Code.**

20 **Section 3.102. Amendments to the International Residential Code, 2003 Edition.**

21
22 (28) **TABLE N1102.1. SIMPLIFIED PRESCRIPTIVE BUILDING ENVELOPE**
23 **THERMAL COMPONENT CRITERIA MINIMUM REQUIRED THERMAL**
24 **PERFORMANCE (U-FACTOR AND R-VALUE).**
25 IN CLIMATE ZONE 10, HDD 4,500-4,999, IN THE CELL WHICH
26 INDICATES THE MINIMUM INSULATION R-VALUE FOR WALLS,
27 STRIKE “R-16” AND SUBSTITUTE “R-13”.

28 ~~[(28)]~~ (29) **Subsection [[R1401.1.1]] M1401.1.1 HVAC Permit Required.**

29 Add new subsection [[R1401.1.1]] M1401.1.1 after subsection [[1401.1]]
30 M1401.1 as follows:

1 **[[R1401.1.1]] M1401.1.1 HVAC Permit Required.** A HVAC permit is required
2 for every system installed in a new single family dwelling or new single family
3 addition.

4 [[(29)]] (30) *Subsection [[R1401.3.1]] M1401.3.1 Plans and Information Required.*

5 Add new subsection [[R1401.3.1]] M1401.3.1 after subsection [[1401.3]]
6 M1401.3 as follows:

7 **[[R1401.3.1]] M1401.3.1 Plans and Information Required.** Each permit
8 application shall be accompanied by a simplified, but accurate, plan drawn to
9 scale which shall include:

- 10 (i) An information block with:
 - 11 a. The specific building address (not lot number);
 - 12 b. Company name doing work;
 - 13 c. Licensee name and signature;
 - 14 d. State license registration number;
 - 15 e. Scale used; and
 - 16 f. North arrow;
- 17 (ii) A room, window, exterior door, or other relevant construction
18 feature including, but not limited to, a skylight, porch, attic access
19 to equipment that may affect the integrity of the HVAC system and
20 its installation; and
- 21 (iii) A line drawing of HVACR system components superimposed on
22 the plan showing the location, dimension, and relevant elements,
23 including, but not limited to:
 - 24 a. Interior or exterior HVACR equipment;
 - 25 b. Duct truck lines and transitions;
 - 26 c. Branch ducts/run-outs, dampers and registers with CFM
27 ratings;
 - 28 d. Thermostats;
 - 29 e. Return ducts and grills;
 - 30 f. Duct insulation; and
- 31 (iv) Manual J calculations for the proposed work.

1 ~~[(30)]~~ (31) Chapters 24 through ~~[(24)]~~ 42. Delete these chapters.

2

3 ***Section 3. And Be It Further Enacted*** by the County Council of Howard County,

4 *Maryland, that this Act shall become effective 61 days after its enactment.*